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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,177	07/11/2001	Steven Paul Jones	ROC920010100US1	9365

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EXAMINER

RUHL, DENNIS WILLIAM

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/903,177	Applicant(s) JONES, STEVEN PAUL	
	Examiner Dennis Ruhl	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-21 are rejected under 35 U.S.C. 101 as Article I, Section 8, Clause 1 of

The US Constitution provides:

"The Congress shall have Power To lay and collect Taxes, Duties, Imports, and Excises, to pay the debt and provide for the common Defence and general Welfare of the United States".

Any patent issuing on claims 1-21 would have the effect of precluding the Congress from freely collecting taxes (i.e. the taxing of fuel purchases) pursuant to Article I, Section 8, Clause 1. If the Congress decided to tax fuel purchases and make the amount of the tax dependent on certain factors related to a person's vehicle, a patent granted on claims 1-21 could prevent Congress from collecting taxes used to provide for the general Welfare of the United States. Currently a program at Oregon State University is being funded by the United States Federal Government (with the funds having been allocated by Congress) to study the concept of determining the price of a gas tax based on the mileage a driver drives (see the "OSU researchers study mileage-based gas tax" article included with this office action). This would have the effect of determining the price of a fuel purchase as is claimed in claims 1-21. This is direct evidence that the method of claims 1-21, if granted Patent rights, would prevent Congress from collecting taxes as set forth in Article I, Section 8, Clause 1.

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3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for verifying the correct price for fuel based on factors such as fuel economy, vehicle weight, emissions, etc., the specification does not reasonably provide enablement for determining the correct price for fuel based on the fuel level in a gas tank or the rate of change of the fuel level. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims. If the fuel pump computer calculates the price of fuel based on the vehicle's gas mileage or the vehicle weight, the amount of fuel in the gas tank or the rate of fueling has nothing to do with the correct price for the fuel, because the price is not dependent on the fuel level at any given time or the rate of fueling. Additionally, with respect to the rate of fueling, this will depend on the fuel pump dispenser itself (what the pumping rate is) and how many people are fueling up at one time (the more fueling at the same time the slower the pump goes) so one of skill in art would have no way to figure out the correct price for fuel based on the rate of fueling. One of skill in the art would necessarily have to undergo undue experimentation to figure out how to practice the invention recited in claim 13.

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1,22,36, are rejected under 35 U.S.C. 102(b) as being anticipated by the article entitled “Minnesota Representative Proposes Mileage Tax to Replace Gas Tax” (1/4/00). The article discloses the step of selling fuel, where the tax the government will charge for the fuel purchase depends on the mileage one drives. A chip (storage device) in the fuel tank stores vehicle data, and a chip in the fuel pump calculates the amount of the tax, which results in an end price for the fuel purchase. The step of transmitting the data from the vehicle to the pump computer with some kind of transmitter is inherent in the article. Somehow the data from the gas tank chip has to be transmitted to the fuel pump so that a price can be calculated.

7. Claims 22,28-33 rejected under 35 U.S.C. 102(b) as being anticipated by Walkey et al. (4469149).

For claim 22,28,29,30,33, Walkey discloses a system for determining the price of fuel based on data transmitted from the vehicle to the pump. Walkey discloses a

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storage device 10, a transmitter 20. The pump determines the price of fuel based on the data transmitted to the pump. See column 5, lines 3-6. The price for fuel will be determined based on the grade of fuel one desires.

For claims 31,32, the claimed cylindrical collar is considered to be the aluminum backing of the bar code. This is the same as a collar. The actual stripes that make up the bar code are laid down on the aluminum backing.

8. Claims 22,33-35, are rejected under 35 U.S.C. 102(e) as being anticipated by Marion (2002/0046117).

Marion discloses a system where a transponder in a vehicle can communicate wirelessly with a fuel pump to transmit data indicating how much fuel is in the tank and the fuel pump has a computer that will determine how much it will cost to fill up the tank. The storage device/transmitter is 64 and the pump is 18 (has a computer). See paragraphs 230-243.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over the article entitled "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" (1/4/00). The article discloses the invention substantially as claimed. The article

discloses a storage device in the form of a chip but does not disclose that the storage device is a semiconductor memory. The examiner notes that the instant specification does not disclose that the use of a semiconductor memory solves any stated problem or produces any unexpected result, so the examiner concludes that the type of storage device utilized is an engineering design choice that is obvious to one of ordinary skill in the art. The type of storage device used does not change how the overall method and system operate and the invention will work equally well with a chip for the storage device or with a semiconductor memory as the storage device.

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the article entitled "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" (1/4/00) in view of the "Transportation Issues" article (1/29/01). The Minnesota article discloses the invention substantially as claimed. The Minnesota article deals with taxation. The article states that the mileage tax is attractive because it is more accurate in charging the drivers for the real cost of the use of the highways. The tax is a user fee based tax, the more you use the system, the more you pay in tax. The article recognizes the concept of taxing a user based on their use and damage done by that use. The article does not disclose using weight data in the calculation of the tax on the fuel purchase. "Transportation Issues" teaches that weight is a factor to be taken into consideration for vehicle taxation purposes. Page 3 specifically states that "In reality, damage to roads is determined by miles traveled and the weight of the vehicle.". Because mileage and weight do the damage to the roads, it would have been obvious to one of ordinary skill

in the art at the time the invention was made to use the weight of the vehicle as data to be used in determining the tax for the user, so that a more accurate taxation system is put into place so that users who use the roads the most will pay the most in taxes.

12. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the article entitled "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" (1/4/00) in view of the First report of the "Vehicles Task Force" from the UK (has a date prior to 12/1/2000, which is the date of the final report from the Task Force, so the first report was earlier). The Minnesota article discloses the invention substantially as claimed. The article does not disclose using emissions type of data or the vehicle ID number or whether or not the vehicle uses fuel from a renewable resource type of data in the calculation of the tax on the fuel purchase. The Task Force report discloses on page 2, that in 1999 the UK government introduced a graduated tax for the roads, to reflect the importance of fuel consumption to the environment. In 1999 the road tax will be based on the engine size of the vehicle and starting in 2000, the tax will also take into account the carbon dioxide emission from the vehicle.

For claim 4, "Task Force" discloses taxing a user based on a particular product emitted from their exhaust (as well as engine size). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the amount of carbon dioxide emissions from the vehicle as data to be used in calculating the price of the fuel purchase. This would be a more accurate way to tax users for the real cost they inflict on the roads and to the environment.

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For claims 5-7, "Task Force" discloses the use of engine size for determining the amount one owes for a road tax. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the engine size (engine type) as data to be used in calculating the price of a fuel purchase. It is well known that vehicle ID numbers identify the type of engine a vehicle uses, as well as identifying other things such as number of doors, optional equipment etc.. on the vehicle. It is considered obvious to one of ordinary skill in the art at the time the invention was made to use the vehicle ID number to identify the engine size, so that the tax can be calculated. The vehicle ID (engine size and type necessarily go together) would be an indicator of whether or not a vehicle is of a hybrid type or whether or not the vehicle uses fuel from a renewable resource.

13. Claims 8-10, 19-21, are rejected under 35 U.S.C. 103(a) as being unpatentable over "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" (1/4/00). The article discloses the invention substantially as claimed. Not disclosed is exactly how the fuel pump computer calculates the tax for the fuel, that the fuel price is displayed to the customer, and that the storing of the data is done under the direction of a regulatory agency.

For claims 8-10, It is considered obvious to one of ordinary skill in the art at the time the invention was made to have the fuel pump computer consult a table (database) or use an equation (i.e. $\text{tax} = (0.10) \times (\text{miles driven})$, for a 10% tax) to determine the particular tax owed. As an example, for income taxes, equations are used to calculate a

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taxable income, then one can look to a table, find their taxable income, and then see what tax they owe in taxes. Using a table and/or equations to calculate the tax (and the end price for the fuel) is considered obvious to one of ordinary skill in the art at the time the invention was made.

For claim 19, it would have been obvious to one of ordinary skill in the art at the time the invention was made to display the price of fuel for the customer. It is well known and very old in society to advertise the price of an item so the consumer knows how much it will cost. The method step of claim 19 is very obvious.

For claim 20, it would have been obvious to one of ordinary skill in the art to display the manner in which the fuel price was calculated along with the price. This would ensure that the consumer knows how they are being charged for the calculated price. Because the sale of fuel in the United States is regulated by the Federal Government, one cannot simply charge any price they want to for gas and not inform the consumer of how the price was determined.

For claim 21, if one were to charge fuel prices based on vehicle data as is claimed, this would come under the authority of the Federal Government and their authority to collect taxes, regulate commerce, etc., so it is considered obvious to one of ordinary skill in the art at the time the invention was made to store vehicle data under the direction of a regulatory agency. The Federal government would have to authorize the charging of fuel prices based on vehicle data, so the entire process would be under the direction of a regulatory agency.

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14. Claims 11,12,14,18, are rejected under 35 U.S.C. 103(a) as being unpatentable over "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" (1/4/00) in view of Marion (2002/0046117). The Minnesota article discloses the invention substantially as claimed. Not disclosed is that the communication between the gas tank chip and the fuel tank chip is done wirelessly or by cable, plug, and jack setup. Marion discloses a system where a transponder in a vehicle communicates wirelessly with a fuel pump to transfer vehicle data (ullage information) to the fuel pump that allows the fuel pump to determine how much it will cost to fill up. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize wireless communication to allow the transfer of data to occur. This provides the customer with a very easy to use, no hassle, method of data transfer as is disclosed by Marion. Because wireless communication technology is an advance over wired (cable) communication, the use of a cable as is claimed in claim 14 is also considered obvious. See paragraph 66 of Marion for the disclosure of infrared data transmission (wireless).

With respect to claim 12 when a person is fueling up their car's gas tank, they inherently are periodically monitoring that the gas is going into their vehicle (that the data was sent from). One way to look at this is that it is very common practice for a person to monitor a fueling operation so that fuel is not spilled on the ground (overfilling of the tank). Another way to look at this is that a person paying for fuel to gas up their car will monitor the fueling operation to make sure another customer does not fill up their car on someone else's bill. Verifying that the fuel you are paying for is actually going into your vehicle is inherent to the purchase of fuel in the Minnesota article.

15. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" (1/4/00) in view of "Technologies and Policies for Controlling Greenhouse Gas Emissions from the U.S. Automobile and Light Truck Fleet" (January 2000). The Minnesota article discloses the invention substantially as claimed. The Minnesota article deals with fuel taxation. The article states that the mileage tax is attractive because it is more accurate in charging the drivers for the real cost of the use of the highways. The tax is a user fee based tax, the more you use the system or cause damage to the system, the more you pay in tax. The article recognizes the concept of taxing a user based on their use and damage done by that use. The "Technologies" document deals with many issues, one of which is fuel taxation. On page 7, it is stated that higher fuel prices provide incentives for consumers to purchase and manufacturers to produce more efficient vehicles. Also stated is that economists believe that fuel prices are too low and do not reflect the externalities (real costs) associated with a fuel purchase. The distance a vehicle is able to go on a unit of fuel is a direct indication of how fuel-efficient a vehicle is. It makes sense that if one already owns a fuel-efficient vehicle, they should not have to pay the higher fuel prices because they already have a fuel-efficient vehicle. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fuel efficiency data (gas mileage) of a vehicle in the calculation of the gas tax in the Minnesota article, so that the true cost that the unit of fuel is reflected in the purchase and consumers have an incentive to move to more fuel economic vehicles.

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16. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walkey in view of Pollock (5923572). Walkey discloses the invention substantially as claimed. Walkey discloses a system for determining the price of fuel based on data transmitted from the vehicle to the pump. Walkey discloses a storage device 10 and a transmitter 20. The pump determines the price of fuel based on the data transmitted to the pump. See column 5, lines 3-6. The price for fuel will be determined based on the grade of fuel one desires. Walkey does not disclose that the data storage unit is a magnetic material and that the fuel nozzle has a transducer capable of reading the magnetic material. Pollack discloses in the "History of the Related Art" section of the patent that prior art fuel control systems have long incorporated many method of transferring information from the vehicle to the fuel pump. Included in the numerous manners of data transfer are magnetic stripe cards as well as bar code readers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a magnetic strip for the storage device of Walkey along with a magnetic strip reader for the fuel nozzle because Pollack recognizes that bar code readers and magnetic cards are two of many known prior art methods in which to transfer data in a fueling situation.

17. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" (1/4/00) in view of Walkey et al. (4469149). The Minnesota article discloses the invention substantially as claimed. The article does not disclose that the data transfer is accomplished by

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having a bar code on the inside of the gas tank filler neck and a bar code reader in the fuel nozzle. Walkey discloses a system for transferring vehicle data from a vehicle to a fuel dispenser. Walkey discloses a storage device 10 in the form of a bar code and a bar code reader 20. It would have been obvious to one of ordinary skill in the art at the time the invention was made use the system of data transfer of Walkey in the method of the Minnesota article so that the transfer of data from the vehicle to the pump can be accomplished easily and efficiently as disclosed by Walkey.

18. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Minnesota Representative Proposes Mileage Tax to Replace Gas Tax" (1/4/00) in view of Walkey et al. (4469149) and further in view of Pollock (5923572). Not disclosed is that the data storage unit is a magnetic material and that the fuel nozzle has a transducer capable of reading the magnetic material. Walkey discloses a system for transferring vehicle data from a vehicle to a fuel dispenser. Walkey discloses a storage device 10 in the form of a bar code and a bar code reader 20. It would have been obvious to one of ordinary skill in the art at the time the invention was made use the system of data transfer of Walkey in the method of the Minnesota article so that the transfer of data from the vehicle to the pump can be accomplished easily and efficiently as disclosed by Walkey. Pollack discloses in the "History of the Related Art" section of the patent that prior art fuel control systems have long incorporated many method of transferring information from the vehicle to the fuel pump. Included in the numerous manners of data transfer are magnetic stripe cards as well as bar code readers. It

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would have been obvious to one of ordinary skill in the art at the time the invention was made to use a magnetic strip for the storage device of Walkey along with a magnetic strip reader for the fuel nozzle because Pollack recognizes that bar code readers and magnetic cards are two of many known prior art methods in which to transfer data in a fueling situation.

For claim 16, when a person stops fueling to go home and go to sleep (a predetermined time), the next time they refuel, they will need to place the nozzle in the fuel tank filler neck again (past the magnetic material again) so that the data can be read again.

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lamont et al. (4934419), Oberrecht et al. (5605182), and Van Ness (4263945) disclose devices that transfer data from vehicles to fuel pumps.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Ruhl whose telephone number is 703-308-2262. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 703-308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'D. Ruhl', with a long horizontal flourish extending to the right.

DENNIS RUHL
PRIMARY EXAMINER